

Title (en)
ROTARY PUMP

Title (de)
ROTATIONSPUMPE

Title (fr)
POMPE ROTATIVE

Publication
EP 1133640 B1 20060503 (EN)

Application
EP 99970153 A 19991007

Priority
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Abstract (en)
[origin: US6637313B1] A rotary pump consists of a cam ring, a rotor disposed within the cam ring, and a pump body enclosing the cam ring and the rotor. The cam ring includes a cam surface having a centre of symmetry. The rotor has a centre of rotation which coincides with the centre of symmetry of the cam surface, and includes a plurality of fluid chambers. Each fluid chamber comprises an aperture opening into a circumference of the rotor, and a pump element sealingly disposed within the aperture. As the rotor revolves, each element remains in contact with the cam surface and moves over a stroke length between a first position adjacent the radial innermost portion of the respective aperture and a second position adjacent the radial outermost portion of the respective aperture. The pump body includes a fluid inlet and a fluid outlet respectively for transferring fluid to and fluid from the fluid chambers as the rotor rotates. Preferably, the pump also includes an actuator for rotating the cam ring about its centre of symmetry between a first angular position and a second angular position for varying the stroke length of the pump elements.

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